



CONSULTING ASSISTANCE ON ECONOMIC REFORM II

DISCUSSION PAPERS

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Money Markets in Selected Southern African Countries

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MONEY MARKETS IN SELECTED SOUTHERN AFRICAN COUNTRIES

EXECUTIVE SUMMARY

Money markets—markets for short-term debt, such as government Treasury bills, certificates of deposit, or bank-to-bank loans—are important in financial and economic development. They help banks manage their liquidity better, enabling them to borrow from other banks when they are short of funds. This tends to reduce the amount of reserves the banking system needs to hold, freeing more funds for lending. Money markets also provide a channel for central banks to conduct monetary policy through indirect instruments, for instance, buying and selling Treasury bills. Because indirect instruments work through influencing incentives, they are more market-oriented and efficient than direct instruments such as credit ceilings, which dictate to banks what to do and thus contain an element of central planning.

Information on money markets in sub-Saharan African countries is scarce. As part of USAID's Consulting Assistance in Economic Reform (CAER) II project, an IMCC team was asked to conduct a survey of money markets in four southern African countries selected by USAID: Botswana, Tanzania, Uganda, and Zimbabwe. In addition, the IMCC team briefly examined Namibia, which is also in the region, and South Africa, which is not a target country for this activity but which has the most active money markets in Africa and provides an example of how money markets in the other countries may develop.

The purpose of this survey was twofold: to determine and describe the current status of money markets in the target countries and to assess the potential near- and medium-term needs for donor technical assistance in enhancing money markets, including the introduction of additional money market instruments. Because of the natural relationship between a country's payments system and the development of a money market, the IMCC team devoted considerable attention to payments systems in the target countries.

The countries in the survey fall into three groups concerning their money markets. Namibia and Botswana have close financial links to South Africa, including a heavy presence of South African banks. The Namibian dollar is pegged to South African rand; the Botswana pula, while floating, is managed with an eye towards its exchange rate against the rand. Because the local subsidiaries of South African banks are able to borrow from their parent banks in Johannesburg with little exchange risk, the banks have not needed to have active local money markets. Tanzania and Uganda are recovering from years of bad economic policy that included nationalization of banks. Local banks dominate the banking system, and because they have no parent banks to borrow from, local money markets are somewhat active. Zimbabwe, like South Africa, already has an active money market; in fact, Zimbabwe's money market is unusually active in relation to its overall level of economic development. This is so at least in part because exchange controls keep capital from flowing out of the country and seeking better investments elsewhere. Within Zimbabwe the money market is less regulated than banks and has been able to offer investors higher rates of interest than banks.

At present, there does not seem to be a strong need to develop new money market instruments in Botswana, Namibia, and Zimbabwe, though in Tanzania and Uganda it is possible that a need may arise in the next few years. However, it may be worth the cost and effort to expand the secondary market for Treasury bills in the target countries, where purchasers of Treasury bills tend to hold them to maturity instead of trading them on the secondary market. Because secondary markets are thin, central banks trying to use Treasury bills to make monetary policy can cause larger fluctuations in interest rates than they would

like. Fitting assistance within the scope of this activity, though, is a separate question.

Stock exchanges are institutions of the capital market rather than the money market, but we discuss them because of the role they could play in providing a secondary market for money market instruments, too, starting with government treasury obligations. Even though trading may be very light in Treasury bills, the local stock markets may be the only secondary market in town.

Generally, money markets have preceded stock markets in economic development. Until the last decade stock markets have arisen in countries where money markets were already advanced by the standards of the era. A key point here is that a country can have a money market without a stock market, but it cannot have a stock market without at least a rudimentary money market (on the level of Namibia, for instance). Stock markets rely on the infrastructure of banks and the payments system. When people buy stock, they are buying it with money in bank accounts; when they sell stock, the proceeds go to their bank accounts. The money market and the payments system can keep functioning even if the stock market experiences a crisis, but if the money market and the payments system do not function, the stock market cannot function either. Consequently, money markets and their institutions will play a larger role in economic development than stock markets in the target countries until those countries become considerably richer. Currently, there are few suppliers of stock because there are few relatively large local companies. There are few demanders of stock because many people are so poor they do not even have bank accounts. People typically take on the risk of investing in stocks only after they have secured a modicum of financial wealth in the lower-risk form of bank accounts.

Money markets and stock markets alike need an efficient payments system to work smoothly. In the countries surveyed checks and other payments are generally processed in two to three days in the largest city of each country, which in every case is where the largest banks and the stock market are located. In the provinces payments systems often work poorly; we have heard stories about checks from outlying districts taking up to six weeks to clear. Slow payments increase the risk that a default by one customer or bank will create a chain of problems for others, by leaving them with bad checks. The Southern African Development Community (SADC), a regional organization of which all of the countries surveyed are members, is making an effort to upgrade and integrate payments systems throughout the region. As part of this effort, each country is doing or has done a study of the present state of the payments system and intends to make changes to the system in the next few years in order to speed payment of checks and other means of transferring funds.

The risk of trouble in the payments system causing trouble to the banking system is highest in Tanzania, which has the slowest payments and is dominated by a local bank. Uganda possibly faces a comparable risk. In Namibia and Botswana the payments system is faster than in Tanzania, and most or all banks are subsidiaries of large foreign banks that are highly unlikely to let them default. In Zimbabwe foreign banks also play an important though not dominant role, and Zimbabwe has also already made considerable progress toward improving its payments system along the lines suggested by the SADC. In our view improving payments systems is vital to helping money markets function to the best of their ability in the target countries, and there may be scope for technical assistance with the payments system in Botswana, Tanzania, and perhaps Uganda.

The end of white minority rule in South Africa and of socialist economic policies in other Southern African countries has given a boost to regional economic cooperation through SADC and other organizations. It is

worth pondering whether regional efforts to upgrade payments systems and make other common efforts will lead to Johannesburg becoming a financial center for the whole of southern Africa. In our opinion that is unlikely. Companies from the region that want to borrow abroad will most likely do so by borrowing in a major international currency through a major international financial center, not by tapping the Johannesburg market unless they want to borrow in South African rands. Regional integration in Southern Africa is likely to take the path of Latin America, where the existence of distinct national monetary policies and the fact that no currency in the region is a major currency of international finance has prevented a regional financial center from emerging.

INTRODUCTION: POTENTIAL BENEFITS OF DEEPER MONEY MARKETS

A country's financial system is critically important to its economic growth. The financial system mobilizes dispersed savings and channels them to many projects that are profitable, but would not be implemented if businesses had to rely only on retained earnings to finance expansion. This study suggests that banking systems in market economies almost everywhere depend on some sort of money market, even if that market is informal and not highly developed.

This paper, part of USAID's Consulting Assistance in Economic Reform (CAER) II project, surveys money markets in four sub-Saharan African countries selected by USAID: **Botswana, Tanzania, Uganda, and Zimbabwe**. For comparative purposes, the survey also covers South Africa and Namibia. We try to produce a clearer understanding of the need for and uses of money markets in these countries, to point out lessons applicable to these and possibly to other countries in the region, and to suggest needs for technical assistance related to the money market functions that might be addressed subsequently in this or another project. The paper will be of interest not only to staff of USAID, but to officials of central banks and finance ministries in sub-Saharan Africa and others concerned with studying or promoting financial development in the region.

Much of the information here has been assembled for the first time in print and is based on fact-finding that could only take place in the field. The table in the "Findings" section summarizes data on 14 different money market-related traits in the six countries. It should prove particularly useful to the reader who needs a quick reference on money markets and some broader financial market aspects of these countries. The survey fills a gap between work oriented purely at monetary policy and work oriented purely at describing the regulations governing capital markets.

Descriptions of money markets in southern Africa are scarce. Some descriptions exist of stock markets, and there are a number of descriptions of monetary policy in various countries (in particular Duesenberry and McPherson, 1991, and Duesenberry, et al., 1996), but written information on money markets is hard to find outside the business press of the countries involved. The countries of the region are just now themselves accumulating information on their payments systems as part of their attempt to meet regional standards for reform. We shall see that, although all six countries share a common heritage derived from British commercial and banking practices, there is today an appreciable variety among the countries in the degree of sophistication of their respective money markets, including the variety of money market instruments available. The bulk of our survey is a comparison of significant traits related to money markets in each country.

The course of financial evolution

Financial evolution begins with informal finance through merchants and money lenders, and in many developing countries informal finance continues to thrive alongside formal finance. Here, though, we are concerned with formal finance, because only formal finance

can readily gather funds on a large scale to lend to business and government. In the early stages of the development of a formal financial system, institutions—banks, insurance companies, and so on—have a role that is dominant due to their acquired experience in evaluating risks. Later, as the financial system grows, so do the attraction of and possibilities for reducing the costs of lending and borrowing by bypassing formal financial institutions and relying instead on financial markets. Financial markets at first usually are informal in the sense of having no central body and no official practices. As they grow, they become formal markets, as was the case of the New York Stock Exchange, which grew out of informal meetings among stockbrokers under a buttonwood tree. *Informal* money markets usually develop before stock markets, though a formal stock market may precede a *formal* money market if, for instance, the banks are government-owned but other large firms are not.

Conventional terminology distinguishes money markets from capital markets. Money markets are markets for debt instruments with a maturity up to one year; capital markets are markets for debt instruments with a maturity of longer than one year and for equity instruments such as shares of company stock. In practice, the two markets need not be sharply distinct. Stocks and long-term bonds are alternatives to short-term debt instruments as investments.

In many countries, stock exchanges trade government debt instruments or securities (sometimes called “government stock,” according to old British terminology) along with corporate stocks. Indeed, government Treasury bills are by far the most widely traded instrument in the southern Africa region, and Treasury bills are bought, held, and sold primarily by banks as a tool for use in their treasury management, that is, the management of their liquid money reserves. The stock exchanges provide a convenient formal procedure for trading government securities. More than in most industrialized countries, the stock exchanges in the countries surveyed here are linked closely to the function of the local money markets because of the role of Treasury bills as a principal instrument in the money markets, either as a secondary trade instrument or as collateral when one bank borrows from another. Hence, the attention in this study to the stock markets.

In the more highly developed countries—South Africa and to some extent Zimbabwe—money markets are also accessed by non-bank entities and serve to replace part of the middleman function of banks. Nevertheless, participants other than banks have historically not used money markets extensively until banks have led the way. Usually other participants have “piggybacked” on the liquidity that banks provide, especially in secondary trading (trading instruments after their original issue). Generally, when a government sells securities at auction, it does so to tap a broader market with keener competition than would be available to it by borrowing only from banks. The government pays less than it would if it borrowed only from banks, while nonbank buyers of government securities earn higher rates of interest than they would from bank deposits. The resulting competition from money markets forces banks to become more efficient. In one of the target countries of this study we shall see why the government issues Treasury bills into the market even though, paradoxically, it has no need to borrow.

Everywhere, including countries where money markets are very informal affairs, banks are the major participants. They need a cost-effective facility to unload excess cash balances or to obtain short-term funds to meet cash needs. The main focus in this study of southern Africa money markets is therefore on banks. Money markets develop most readily if transaction costs are low. A recent study for the IMF Institute surveying money markets in Africa had these observations about transaction costs:

The main impetus for developing money markets comes from the need for banks to manage their liquidity. To handle unexpected fluctuations in liquidity, banks normally exchange reserves in an interbank market. To handle the credit risk associated with the interbank market, prudence demands that the transactions on this interbank market be made against collateral or in the form of final sale and purchase of a riskless asset....

...In Africa, with the exception of South Africa and Zimbabwe, three factors tend to increase transaction costs on the money markets. First, the payment systems are not performing well. The transfer of funds outside the capital city is often slow, which hinders the centralized management of its liquidity by each bank, defeats the purpose of time-sensitive short-term portfolio adjustments, and in effect creates market segmentation. Second, the clearing and settlement procedures for assets that can be bought, sold, or used as collateral in transactions on the money market are not well developed, may be slow, or involve cumbersome handling of paper. Given the state of financial distress that plagues many banks in several countries, it is neither feasible nor desirable to develop a true money market without the support of a secure and efficient mechanism for the transfer and custody of these assets. Third, the lack of available skills in treasury management, as well as the absence of quick and transparent information that would enable the treasurers to assess and forecast the developments influencing the liquidity of the system, tend to increase the cost of treasury functions for the financial intermediaries. (Callier 1996: 196-7).

Access to money markets, even when they are poorly evolved, is necessary for banks in their treasury function (managing assets and liabilities, especially in the short term). The treasury function cannot be highly efficient in a system where payments are highly erratic and slow, because a bank treasurer cannot know what his true cash position is. Therefore, we will look at the efficiency of the payments systems under which the banks function in Botswana, Zimbabwe, Tanzania and Uganda. We will survey the characteristics of money markets in each country, then draw lessons that may apply to other southern African countries as well.

SOUTHERN AFRICAN MONEY MARKETS IN REGIONAL PERSPECTIVE

While money markets allow financial institutions to invest cash rather than letting it sit idle (treasury cash management), they also provide liquidity for capital market transactions. In addition, domestic monetary policies can be more efficiently implemented if domestic money markets are more fully developed. These and other functions of money markets need to be appreciated in order to achieve financial sector development.

Duesenberry and McPherson (1991) have noted that, in sub-Saharan Africa as elsewhere, using indirect instruments of monetary policy can enhance the efficiency of the financial system compared to using direct instruments, provided that a suitable environment exists.

Direct instruments operate, as their name suggests, by giving orders, such as by telling banks they must lend no more than the central bank permits. These instruments have an element of central planning that is often inefficient for the same reasons that central planning in general is inefficient. Indirect instruments operate by influencing incentives rather than by giving orders. For example, when the central bank reduces the interest rate it charges to commercial banks, it is not ordering them to reduce their own interest rates, but it is offering an incentive that generally has that effect. Indirect instruments usually work through the money market, and if no well developed money market exists, the central bank must often fall back on direct instruments.

This suggests two ways of looking at the usefulness of money markets. One way that money markets are useful is that they help the private sector manage liquidity. They are especially helpful for banks, since the banking business is about tailoring the liquidity of banks to match the needs of customers. Another way that money markets are useful is that they provide monetary policy with indirect instruments. **Where active money markets exist, central banks can conduct the bulk of monetary policy by buying and selling in money markets rather than through the less economically efficient channel of direct instruments.**

The importance of money markets

For many years after independence, African governments focused on building *institutions* for financial development while neglecting to implement *policies* that would have encouraged financial saving (Duesenberry and McPherson 1991: 80). For instance, domestic savings had long been discouraged by such policy factors as officially controlled interest rates and other manifestations of repressed financial markets. In some cases, premature encouragement of specialized financial institutions during the 1960s and 1970s led some governments to think that their countries had made more economic progress than they really had.

In the early 1980s, foreign lending to developing countries dropped as a result of the Latin American debt crisis. Many African countries that had come to depend heavily on imported savings found themselves disastrously cut off from access to fresh foreign savings. Capital flight and accelerated inflation resulted, and eventually many institutions

of financial development collapsed. In the 1990s a number of African countries, including Tanzania and Uganda, apparently have learned the error of their ways, and have adopted policies that encourage financial savings.

Understanding these points leads one to ask some questions about the need for money markets and the particular form that money markets take in the countries surveyed. Let us examine the issues in light of our findings about the countries surveyed here.

The **fundamental question is how much the countries surveyed need money markets.** Money markets are important for banks in liquidity management, but are they essential for economic development? Do they have a significant effect on the growth of domestic savings? To address these concerns one needs first to distinguish among degrees of formality in money markets. Since this survey focuses on formal financial institutions, it is not within its scope to investigate informal money-lending activities, even though there are unconfirmed indications that a very heavy volume of informal financing takes place or has done so in the recent past (e.g., borrowing and lending among East Indians in Tanzania). Limiting consideration to formal money markets, then, the countries of the survey fall into three groups.

Namibia and Botswana comprise one group. They are mineral-based economies, wealthier than Tanzania, Uganda, or Zimbabwe, and have closer economic links to South Africa, including close financial links. Four of the five banks in Namibia are subsidiaries of South African banks, the Namibian dollar is pegged to the South African rand, and Namibia has no exchange controls with South Africa. It is practically riskless for the subsidiaries to borrow from their parent banks if interest rates in the Namibian interbank market rise above interbank rates in South Africa. Hence, it is to be expected that an active local money market is slow to develop. Being a financial satellite of South Africa enables Namibia to take advantage of the dynamism of the South African money market. In Botswana all banks are subsidiaries of South African or British banks, but the Botswana pula is not so tightly linked to the South African rand as is the Namibian dollar, and some exchange controls with South Africa exist. The budget surpluses that the government of Botswana has run have made it unnecessary for it to encourage a Treasury bill market. Botswana is not as closely tied to South African financial markets as Namibia is, but is still much more closely tied than the other countries of the survey.

Tanzania and Uganda comprise another group. They are recovering from years of bad economic policy that included nationalization of banks. Because private ownership of financial institutions is new, and because they are extremely poor countries, their money markets are limited. However, they do have somewhat active interbank markets. Local banks dominate the banking system, and they have no parent banks to borrow from. Though lack of capital controls makes it possible for subsidiaries of foreign banks to borrow from their parent banks and to lend that money to local banks if the loan is sufficiently profitable, the currency risk involved is substantial. The argument for making a conscious effort to help develop local money markets is strongest for these two countries, since of the countries surveyed they would benefit the most. Fitting technical assistance

within the scope of this particular project is another question, however.

Zimbabwe stands alone in the third group. (Recall that South Africa is not a target country, but is included in the survey for purposes of comparison.) Zimbabwe already has an active money market, among the most active in the world for a country at its level of economic development. This is a result of its isolation from world financial markets since 1965, when the white minority government issued a unilateral declaration of independence from Britain. The currency left the orbit of the pound sterling; previously, there were no capital controls with Britain and other countries whose currencies were linked to the pound sterling. Capital controls have continued in Zimbabwe ever since, and in the unofficial foreign-exchange market the currency has traded at a discount to the official exchange rate. Financial repression (regulations that channel or subsidize credit to the government and other favored sectors) has also helped spur a wide range of financial institutions and money market instruments in Zimbabwe. The money market and the stock market have experienced less financial repression than the banks, so they have been able to offer higher risk-adjusted returns. That has encouraged their development in the same way that interest-rate ceilings encouraged the development of money market funds in the United States in the 1970s.

Isolating domestic financial markets from world markets and financial repression are ways of developing money markets, but that does not mean they are good ways to encourage economic growth. Botswana, which a generation ago was poorer than Zimbabwe, now has a much higher gross domestic product per person despite having much less active money markets. The ability to obtain funds from foreign money markets can be a satisfactory substitute for a well-developed local money market, though most countries at the next level of economic development beyond Botswana (those that the World Bank classifies as “upper-middle-income”) have active local money markets.

At present, **there does not seem to be a strong need to develop new money market instruments in Botswana, Namibia, and Zimbabwe, though in Tanzania and Uganda it is possible that a need may arise in the next few years.** Except in South Africa and Zimbabwe, money market instruments other than Treasury or central bank bills are rare or nonexistent at present, but there is no obvious demand for other instruments. Nor is there an obvious source of supply, such as large corporations who could reduce their costs of borrowing by issuing commercial paper (short-term corporate securities) to the public rather than dealing with banks.

Managing bank liquidity

When banks in southern Africa have a short-term need for funds, they have the following options for managing their liquidity:

(1) Borrowing funds from other banks. This is a true interbank function that involves minimal transaction costs in southern Africa because negotiations are by telephone. The transfer of funds is simple because it occurs through banks’ accounts at their central bank.

When collateral is involved, Treasury bills serve as a “risk-free” instrument. It should be noted that collateral is not always required; in Tanzania, Citibank pre-qualifies other banks for set limits in interbank borrowing on an unsecured basis. This is an exception, however, and is probably due to the fact that most banks in Dar es Salaam are subsidiaries or branches of major international banks.

(2) Borrowing temporarily from the central bank. Treasury bills often serve as an important part of the transaction. While borrowing from the central bank’s “discount window” is certainly a money market transaction, it is not an interbank transaction in the strict sense. How extensively commercial banks use this option depends upon the rate of interest that the central bank charges and other conditions that the central bank places on borrowing. If the rate is punitively high, a bank will seek other options or may sell Treasury bills to the central bank rather than using them as collateral for a loan, provided that the central bank is buying Treasury bills.

(3) For subsidiaries of foreign banks, accessing their parent banks for funds to carry them over a brief shortage of reserves. This activity may be more accurately described as an “intrabank” money market activity. This option is an important one in the region, where so many banks are subsidiaries of South African or British banks. However, because of foreign-exchange and credit risk, parent banks vary in the level of dependence they allow their subsidiaries. Some insist that these subsidiaries first try to borrow locally if they are short of reserves.

(4) Another group of options is hardly used outside of South Africa and Zimbabwe. It includes such differing instruments as bankers acceptances, repurchase agreements, and negotiable certificates of deposit (CDs). The existence of these instruments in South Africa and Zimbabwe is one indication that those two markets are more advanced (deeper) than the others, while their virtual absence in the other countries is a symptom of shallow markets.

Only when there is no safe, profitable, and liquid alternative will efficient bank treasurers hold liquid balances larger than needed to meet estimated contingencies. Good bank liquidity management may require decisions regarding where to place excess funds when the other banks in a system also have excess funds, as often happens in Botswana, for instance. In the region, excesses of funds beyond those needed by banks to satisfy prudently the needs of their customers may last for extended periods, and under such circumstances an interbank market is not very dynamic. The ability to trade in short-term, low-risk assets is a necessity for efficient liquidity management. If interbank trading is not an outlet and the trading of instruments such as negotiable certificates of deposit or bankers acceptances is little known, then buying and holding Treasury bills to maturity may be the most profitable thing to do, even when, as in Tanzania today, the yield in real (inflation-adjusted) terms is negative. It is beyond the reach of this paper to measure the effects of liquidity management practices on the cost of intermediation, but we suspect that negative yields on Treasury bills partly explain the wide interest rate spread between deposits and loans in Tanzania.

Even in South Africa, with the most developed banking system in the continent, there is no formal or electronic interbank market *among* banks for lending and borrowing funds short term, such as a computer system showing bids and offers of all banks. There is only trading *between* banks of short-term funds, done by phone calls from one bank to another. Retrospective data may be available that influence negotiations between two banks, but this is different from a system in which a bank posts to all participants a price to buy or sell. The interbank market functions in an informal, club-like manner in all the countries surveyed. Bankers indicated no dissatisfaction about the absence of more sophisticated or formal ways of conducting an interbank market. The sentiment is that the system is adequate and avoids the risk associated with dealing in a “blind” market where the other half of the transaction is anonymous.

The Treasury bill market

Except in Botswana, governments issue Treasury bills of three months to one year. Longer-term government notes and bonds are less common. (Recall that government securities up to one year are called bills, one-year to five-year securities are sometimes called notes, and longer-term securities are called bonds.) Banks use their holdings of Treasury bills for liquidity management in the following ways:

- (1) As an *investment* that is normally risk-free and more liquid than other local investments. Whether Treasury bills have a positive or negative real yield varies according to circumstances. In Tanzania Treasury bills formerly offered a highly positive real yield, so high as to divert banks from lending. At present, they offer a negative real yield because the government is curbing its domestic borrowing. Banks may invest in Treasury bills despite negative real yields because more profitable and secure investments are lacking.
- (2) For *satisfying reserve requirements* in some countries. Treasury bills may not be very liquid where there is no secondary market (buying and selling that occurs between the time it is originally issued and the time the issuer redeems it). However, the central bank in most countries stands ready to accept Treasury bills as collateral for emergency loans to commercial banks.
- (3) For use *as collateral* when borrowing from another bank or from the central bank.

Where there is no active secondary market, and where the central bank is under no absolute obligation to act as the buyer of last resort for Treasury bills, one must question whether Treasury bills meet the classical definition of liquid asset instruments for banks: an asset convertible into cash at no loss within three business days. Without the option open to banks to sell Treasury bills *at any time and at nominal cost*, rather than only borrow against them, there is no efficient money market. It is even questionable whether Treasury bills may be considered risk-free if there is doubt about being able to sell them quickly and without much loss. The absence of viable alternatives to Treasury bills in liquidity management only further detracts from any semblance to a real money market.

In the countries of the survey, Treasury bills tend to be held to maturity by banks and other investors. At maturity, investors replace old Treasury bills with new ones of equal maturity because that is the best option under the circumstances. Present arrangements leave mainly unexploited the potential of Treasury bills to be a tool of monetary management. (Botswana is a special case because it runs budget surpluses and does not *need* to issue Treasury bills.) This means that even when central banks want to do open-market operations, the market is limited. On the other hand, governments have effectively exploited the potential of Treasury bills as vehicles for borrowing. Beyond the scope of this study is an exploration of whether governments might do better by relying less on Treasury bills and more on long-term securities.

It may be worth the effort and cost to expand the secondary market for Treasury bills.

Where money markets are narrow, expanding them does not necessarily crowd out private investment. It can even encourage private investment by increasing the attractiveness of investing compared to consuming. Where private initiative is lacking at the start, central banks can provide the initial impetus by making a market. A way some central banks have done so is by undertaking repurchase operations (repos). In repurchase operations an investor buys securities for a period as short as one day, and the seller agrees to buy them back at a slightly higher price at the end of that period. Repos are in effect loans: the buyer lends cash to the seller for the period of the repo. In return, the seller gives the buyer collateral—the securities. If the securities are Treasury bills, the collateral is of relatively high quality and low risk, so the yield tends to be the lowest in the domestic money market. Central banks use repos to influence the money supply and short-term interest rates. When central banks buy securities by doing repos, they pay in cash, thus increasing the supply of cash in circulation (technically, the monetary base). When central banks sell securities in reverse repos (also called simply “reverses”), the buyers pay in cash and the central bank does not recirculate the cash, thus reducing the national supply of cash. Central banks have found repos more convenient than other ways of influencing the money supply, which is why almost everywhere an active secondary market for government securities exists, central banks use it to do repos. Where an active secondary market does not exist, the central bank may have a hard time trying to act as a dealer in Treasury bills without causing fluctuations in interest rates larger than it would like.

Money markets and stock markets

Stock exchanges are institutions of the capital market rather than the money market, but we discuss them because of the role they could play in providing a secondary market for securities, starting with government treasury obligations. Even though trading may be very light in Treasury bills, the local stock markets may be the only secondary market in town. In Botswana, for example, the stock exchange handles only a handful of trades per month in Bank of Botswana Certificates, which the money market uses in the absence of Treasury bills.

The worldwide wave of privatizations that began in the 1980s and is continuing today has focused attention on stock markets as vehicles for promoting economic growth. Vast areas

of the world that lacked stock markets a decade ago now have them. They have sprung up in places that would then have seemed unpromising. Africa has shared in the trend. The situation with stock markets in the countries surveyed is similar to the situation with money markets. Namibia and Botswana have small stock exchanges. Namibia's stock exchange is active, but the bulk of the activity comes from stocks cross-listed on the Johannesburg stock exchange, not from local trading in local stocks. Tanzania and Uganda are just developing stock exchanges. Zimbabwe has a relatively well-developed stock exchange.

The hoopla about stock markets raises the question whether some developing countries are putting the cart before the horse. Generally, money markets have preceded stock markets in economic development. Until the last decade, stock markets have arisen in countries where money markets were already advanced by the standards of the era. One reason for this is that businesses typically prefer to resort to debt financing more often than to equity financing. Companies conduct transactions with banks daily, whereas they issue or retire stock infrequently. Banks' roles in money markets is in part that of acting as middlemen between their customers and financial markets. Another reason that money markets have preceded stock markets is that equity is harder to evaluate than debt. The value of a share of stock is fluctuating and depends on expectations about the future prospects of the issuer, which requires considerable information to determine properly. The value of a bank deposit is fixed, so all the depositor need know is that the bank seems solvent and keeps its promises.

A key point here is that **a country can have a money market without a stock market, but it cannot have a stock market without at least a rudimentary money market** (on the level of Namibia, for instance). Stock markets rely on the infrastructure of banks and the payments system. When people buy stock, they are buying it with money in bank accounts; when they sell stock, the proceeds go to their bank accounts. As with other payments, purchases and sales of stock affect how much reserves individual banks have, and create a need for banks that are short of reserves to borrow in the interbank market. The money market and the payments system can keep functioning even if the stock market experiences a crisis, but if the money market and the payments system do not function, the stock market cannot function either.

Consequently, **money markets and their institutions will play a larger role in economic development than stock markets in the target countries until those countries become considerably richer.** Currently there are few suppliers of stock because there are few relatively large local companies. There are few demanders of stock because many people are so poor they do not even have bank accounts. The days of mass participation in the stock market directly or through mutual funds and pension funds are still far off.

Money markets and the payments system

The payments system in the countries surveyed function reasonably well in the capital cities. In the provinces, payments systems often work poorly; we have heard stories about

checks from outlying districts taking up to six weeks to clear. This adds an element of guessing to the treasury function in banks, a function that in the best of situations is never completely accurate. For the treasurer of a bank, the payment system is another information system he must rely upon. Improving banks' ability to manage their liquidity leads indirectly to more efficiency in money markets.

Making payments speedier also reduces risks of default to the banking system as a whole. Bankers and regulators around the world have in recent years become more alert to the possibility of a chain of defaults creating havoc in the banking system. Slow payments systems create an accumulation of payments that are not honored if a bank customer or a bank itself defaults. Default by one important party can leave other parties unable to make their payments, too, because they are counting on payments from the defaulting party. In all of the countries surveyed here, settlement is on a net basis, that is, banks wait until a specified time of day to present checks from other banks and then make payments to settle their combined balances. The risk of waiting a few hours to settle payments rather than settling continuously is small compared to the risk of waiting days while checks are routed from their recipients back to the check writers.

The Southern African Development Community (SADC), a regional organization of which all the countries surveyed are members, is making an effort to upgrade and integrate payments systems throughout the region. As part of this effort, each country is doing or has done a study of the present state of the payments system and intends to make changes to the system in the next few years in order to speed payment of checks and other means of transferring funds. The goal is for every country to meet a regional standard for compatibility by 2003. A so-called Green Book describes the standard.

The risk of trouble in the payments system causing trouble to the banking system is highest in Tanzania, which has the slowest payments and is dominated by a local bank. Uganda possibly faces a comparable risk. In Namibia and Botswana the payments system is faster than in Tanzania, and most or all banks are subsidiaries of large foreign banks that are highly unlikely to let them default. In Zimbabwe foreign banks also play an important though not dominant role, and Zimbabwe has also made considerable progress already toward improving its payments system along the lines suggested by the SADC.

In our view, **improving payments systems is vital to helping money markets function to the best of their ability in the target countries.**

Regional implications

Meeting the standards for payments systems proposed by the SADC will facilitate regional trade. It may also help Johannesburg to become a regional financial center for countries besides those where South African banks dominate. As exchange controls continue to be relaxed in South Africa and in other countries in the region that have them, there will be more opportunity for banks and businesses to lend and borrow across borders. Johannesburg is the obvious place to go to take advantage of such opportunities.

It is unlikely that Johannesburg will develop as a financial center for southern Africa in the way that London has developed as a center for Europe, though. Most international money market activity in London comes from currencies other than the pound sterling. There are active markets in the offshore issue of securities in dollars, francs, marks, and so on, as well as the world's biggest concentration of foreign-exchange dealers. In southern Africa the rand is the only currency that could conceivably in the near future achieve second-tier international status comparable to the Spanish escudo or the Belgian franc. Third-tier and fourth-tier currencies, such as the other countries of the region have, generate insufficient business to attract much attention in international markets. Companies from the region that want to borrow abroad will most likely do so by borrowing in a major international currency through a major international financial center, not by tapping the Johannesburg market unless they want to borrow in rands. **Regional integration in southern Africa is likely to take the path of Latin America, where the existence of distinct national monetary policies has prevented regional money markets from becoming tightly linked.**

The table below summarizes key characteristics of money markets in the countries surveyed. The country studies that follow begin with South Africa, the most advanced economy in the region, because it shows what money markets elsewhere in the region may look like after some years of development. By understanding the sophistication of South Africa's banks at home and in the neighboring countries, and by seeing that current account transactions among the target countries are largely unfettered today, we can better understand why in the target countries there has been little incentive for money markets to expand in scope or sophistication, with the exception of Zimbabwe.

Summary table of money market characteristics

	South Africa	Botswana	Namibia	Tanzania	Uganda	Zimbabwe
General	Sophisticated financial system	Government surpluses; rapid growth; depends highly on diamonds	Close links to South Africa	Extensive reforms; respectable recent growth from a low base	Extensive reforms; rapid growth from a low base	Financial repression; sophisticated financial system
Exchange rate	Floating	Loosely targeted to South African rand/U.S.\$ basket	Pegged 1:1 to South African rand	Floating	Floating	Floating
Exchange controls	Controls on capital outflows outside Common Monetary Area	Controls on capital inflows and outflows	Controls on capital outflows outside Common Monetary Area	No controls	No controls	Strict controls on capital outflows
Banking system	Some foreign participation; nonbank institutions important	All banks are subsidiaries of South African and British banks	Dominated by subsidiaries of South African banks	Some foreign participation	Some foreign participation	Extensive foreign participation; nonbank institutions important
Reserve requirements	1-3%	1-3%	1-3%	12%	25%	Average 22%
Interbank market	Informal	Informal	Informal	Informal	Informal	Informal
Central bank open-market operations	Repos	No	No	Repos planned	No	Repos
Stock exchange	Well developed	Small	Small	Just starting	Just starting	Fairly well developed
Government securities	Treasury bills and bonds	None	Treasury bills and bonds	Treasury bills; bonds planned; real rates negative	Treasury bills	Treasury bills and bonds; real rates negative
Secondary market for government	Active	Thin market for central bank securities	Thin	Thin	Thin	Active

securities						
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	South Africa	Botswana	Namibia	Tanzania	Uganda	Zimbabwe
Other money market instruments	Wide range of instruments	Central bank securities	Negotiable CDS	Negotiable CDS, commercial paper	Central bank securities	Wide range of instruments
Capital market instruments other than stocks	Range of instruments	First bond issue planned	None	None	None	Range of instruments
Speed of payments settlement	Largest city: overnight among banks	Capital: 5 days; elsewhere: 10 days	Capital: overnight; interior: slow.	Largest city: 3 days; elsewhere: 28 days	Capital: 3 days; elsewhere: 10 days	Capital: 2-21 days*; elsewhere: 10-21 days
Payments technology	Manual, paper-based; ATMs widespread	Manual, paper-based; ATMs not linked across banks	Manual, paper-based; ATMs scarce	Manual, paper-based; ATMs planned	Manual, paper-based	Manual, paper-based, but electronic clearing planned; ATMs widespread

Notes

*Building societies impose lengthy delays on payments within the capital to discourage customers from making frequent payments from savings accounts.

ATMs = automatic teller machines; CDs = certificates of deposit.

SOUTH AFRICA

General

South Africa is used in this study as a standard against which the target countries can be compared. It is by far the largest and most financially developed economy in Africa, having the most sophisticated banks and the biggest stock exchange. South Africa has strong historical and economic links with three of the other countries of the survey: Botswana, Namibia, and Zimbabwe. Namibia (examined briefly for comparative purposes) gets 85 percent of its imports from South Africa, with Botswana getting somewhat less. Wholly- or partly-owned subsidiaries of South Africa's largest banks dominate banking in Namibia and Botswana, are important in Zimbabwe, and are present in Tanzania and Uganda. Benefits of this presence include the strong financial support and advanced technology these banks are able to provide their subsidiaries, particularly in Namibia and Botswana. Also, treasury functions of the subsidiary banks are often greatly facilitated by their ability to move money back and forth through their current accounts with their South African parent banks.

Interestingly enough, it appears that one of the reasons why money markets have not developed beyond a very informal and simple stage in Botswana and Namibia is precisely because the banks in those countries enjoy the ability to move money back and forth with their South Africa affiliates to satisfy needs in treasury management, and thus there is no perceived need for a more sophisticated and expanded local money market. Exchange liberalization in these countries might, paradoxically, inhibit the growth of local money markets.

Financial markets

Exchange rate and exchange controls: The South African rand has a floating exchange rate. Exchange controls still exist but are being gradually eliminated both for individuals and for corporations. The rand is convertible for current-account transactions. The government has recently loosened capital controls, and individuals are now allowed to invest substantial sums outside the country. A similar loosening of exchange controls is occurring in Namibia, Botswana, and Zimbabwe.

South Africa and Namibia, along with Swaziland and Lesotho, are part of a Common Monetary Area. Members have rigidly pegged exchange rates with the South African rand (1 unit of local currency = 1 rand) and impose no exchange controls on transactions within the area, but have imposed some controls, particularly on capital account transactions, with the rest of the world, although such controls are rapidly being discarded. At one time Botswana also belonged to the Common Monetary Area, and avoiding large fluctuations with respect to the rand is still an important goal of its monetary policy. For instance, the exchange rate of the Botswana monetary unit, the pula, is set according to a basket of currencies composed 85 percent of the South African rand.

Banking system: There has already been considerable disintermediation in the commercial banking sector. Nonbank sources of financing now represent nearly 2.5 times the financing handled by banks, according to Citibank in Johannesburg. Bank credit as a share of total credit is similar to the proportion existing in the United States.

Reserve requirements for banks range from less than 1 percent to 3 percent, depending on the type of deposit. A liquid asset requirement also exists: banks must hold 5 percent of their total liabilities in the form of South African government bonds. Reserve requirements are similarly very low in Botswana and Namibia, and bankers did not feel that the requirements constituted an implicit tax. This is in contrast to Uganda and Zimbabwe, where reserve requirements are high enough to be considered a sign of financial sector repression.

South Africa has many licensed banks, but most are either small, specialized banks or representative offices of foreign banks. There are only 15 full-service banks, the top seven of which have 90-95 percent of total loans and deposits. Real interest rates charged by South African banks are among the highest in the world. Banks are generally sophisticated but overstaffed compared to their American counterparts and have a very low ratio of revenue to expenses. This may be partly attributable to financial regulation that maintains barriers and lessens competition among different types of financial institutions — barriers that are crumbling in the United States, thanks to improved technology and gradual deregulation.

Interbank market: Trading of reserves among banks is active, but it is done on a bank-to-bank basis over the telephone, a practice no more sophisticated than that prevailing in the target countries of this study. Unlike in the United States and many other countries, reserves are not openly traded through brokers or over trading screens linked to a computer network. Bankers see no particular need to establish a more formal interbank market. Besides the costs involved, they evidently want to control their credit risks by knowing before each trade who the other party is. This same attitude is prevalent in the other countries of the study. Bankers have access to a discount window at the Reserve Bank of South Africa, the central bank, as a backup tool in their treasury operations.

Stock exchange: The Johannesburg Stock Exchange provides a basis for comparison with other stock exchanges in the region. The Johannesburg exchange is mammoth for an exchange in an emerging market: it ranks fifteenth worldwide in capitalization, behind Australia and ahead of Italy. Of the consolidated market capitalization for all companies listed on all exchanges in Africa, the Johannesburg exchange represents 97 percent. Market liquidity or turnover (total value of transactions divided by total market capitalization, annualized and expressed as a percentage) was 14 percent in early 1997—still low, but increasing. (In contrast, turnover in more active stock markets can easily be three times as high.)

Despite recent liberalization of exchange controls, insurance companies and pension funds

still must invest the bulk of their funds in South Africa, which practically forces them to invest heavily in stocks of the Johannesburg Stock Exchange. In Namibia and Botswana, though not in Zimbabwe, non-bank financial institutions are permitted to invest a larger share of their funds abroad to reduce country risk.

Money market instruments

Government securities: The South African government has a good record as a borrower, and unlike some countries of the region, it can easily raise money in international capital markets. There now is a Bond Exchange in Johannesburg to provide a secondary market for treasury bills and government bonds. However, it is a very new exchange, and trading is light so far.

Other instruments: Banks are aware of alternatives to deposits such as repurchase agreements (repos) with clients who have temporary excess funds, but repos are rare in practice. Given the size of the capital market in South Africa, securitized debt instruments are also possible, but banks seldom issue them. The capital market is sufficiently large that big corporations can obtain loans by issuing their own bonds rather than by going through banks, and many do so.

The payments system

The payments system is primarily paper-based, using checks, though electronic transfers are gaining popularity for payment of salaries and some other transactions. Clearing houses exist in a number of cities, with the main one being in Johannesburg, since it is the financial center of the country. Clearing is done both manually and through exchange of computer disks, depending on the location. Clearing takes place overnight, resulting in next-day settlement. The commercial banks and the central bank are implementing a new system called South African Multiple Option Settlement (SAMOS), which will result in same-day settlement. Customers do not have access to funds as quickly as the banks do, of course.

Automatic teller networks exist and are linked, so that people can withdraw money at one bank's teller machine using a card from another bank; an example is the SASWITCH network. At present, shops accept only credit cards for electronic payment, not debit cards such as one can use at automatic teller machines. Banks are investigating the possibility of issuing stored-value cards for people to use in shops.

The payments system in South Africa is not as far ahead of the other countries in the region as, say, the stock market. Changing from a paper-based to an electronic system requires more effort in countries where checks are widely used than where most payments are habitually made in cash and few by check. This is a curious phenomenon that has also been noted in some Eastern European countries such as Hungary, where checking accounts were never much in use and where a 'leapfrog' from cash payments directly to widely popularized electronic payments is being adopted successfully.

Lessons learned

South Africa serves as a model against which to compare the other countries. In many ways the financial system is highly developed and sophisticated. Banks and insurance companies enjoy the benefits of the latest technical innovations. An investor has a wide variety of short-, medium-, and long-term instruments available and enjoys access to one of the major stock exchanges in the world. Yet, there are anomalies in this sophisticated financial system, and one of the most interesting for our study is the simple way banks participate in the money market to manage their liquidity—via one-on-one negotiations by phone in a clubby system that has not changed in decades.

It is interesting to note that financial market sophistication and liberalization do not necessarily march in lockstep—the two countries in the region that have the most diversified and sophisticated financial markets, South Africa and Zimbabwe, are the two that are the least liberal in regard to freedom of investment decisions abroad for insurance companies and pension funds, while less sophisticated Namibia and Botswana are much more liberal in that respect.

BOTSWANA

General

Botswana is a fascinating case study. Economically, Botswana enjoys several features that make it unique in Africa. For one thing, its government has no need to borrow but does so anyway for reasons that, as we shall see, make perfectly good sense in the Botswana context. The population is only 1.4 million people, and Botswana has been among the fastest-growing economies in the world during the last generation because of wealth generated by diamond mining, in which it is the world leader. The government of Botswana owns the Debswana diamond company jointly with DeBeers Consolidated Mines of South Africa. The company leases the diamond mines from the government, which owns all mineral rights in the country. Diamonds account for about 75 percent of Botswana's export earnings, and in most years account for more than 50 percent of government revenue.

Gross domestic product per person is among the highest in Africa. The economy is highly open: the annual value of imports plus exports exceeds the gross domestic product. Botswana's dependence on diamonds leaves it potentially vulnerable to fluctuations in diamond prices. Since independence in 1966, the government of Botswana has practiced conservative monetary policies. To provide a cushion against a sudden drop in diamond prices, the government, through the central bank, has long held foreign exchange reserves equivalent to at least two years of imports. Botswana is closely linked economically to South Africa.

Financial markets

Exchange rate and exchange controls: The central bank loosely targets the exchange rate of the Botswana pula according to a basket composed 85 percent of the South African rand and 15 percent of the U.S. dollar and other currencies. The targeting is loose because the actual exchange rate can deviate from the movement of the currencies in the basket if the central bank thinks a deviation is justified.

Banks can freely transfer funds outside the country to manage liquidity, for example to and from parent banks in Johannesburg. Botswana has liberalized its exchange controls in recent years. In 1996 it removed all restrictions on current-account transactions. As for capital-account transactions, foreigners may repatriate up to 50 million pula (roughly U.S.\$14 million) at any one time without advance authorization. Resident companies and individuals may make capital investments abroad, subject to review by the central bank if they exceed fairly high ceilings. No restrictions exist on foreign ownership of companies in Botswana, nor are there any restrictions on capital and dividend flows for portfolio investors (investors who own less than 5 percent of the stock of a company). Financial institutions may invest up to 75 percent of their funds outside the country. Life insurance companies and pension funds have taken advantage of this provision. Foreign-currency accounts may be opened in local banks without approval from the central bank.

Banking system: Botswana has four private commercial banks, two of which are subsidiaries of South African banks and two of which are subsidiaries of British banks. As in South Africa and Namibia, reserve requirements on deposits are low, averaging 3.25 percent.

Interbank market: The interbank market is informal, with trades arranged by phone calls between banks. Since all the banks are subsidiaries of large foreign banks, they always have the possibility of borrowing from their parent banks. The Bank of Botswana, the central bank, acts as a lender of last resort. It operates a discount window and charges a penalty rate of interest in the rare case where a bank might need to borrow reserves from the central bank.

Stock exchange: The Botswana Stock Exchange was established in 1989. In 1995 the statute governing it was revised; the new law is modeled on legislation in force in neighboring Zimbabwe. The stock exchange is supervised by a committee appointed by the Ministry of Finance and administered by the sole registered stockbroker in the country, Stockbrokers Botswana, an affiliate of a major British investment house. The settlement system is quite simple and nearly error-free since there is only one brokerage house involved with the exchange. There are only 12 listed companies, of which five are financial, including three banks. There are only 3,000-4,000 trades per year. The government is trying to encourage the growth of the stock exchange, which occupies two or three small rooms on the ground floor of an office building. It offers companies that list their shares on the stock exchange a special 12.5 percent deduction on taxable income for five years. Profits on the sale of shares are not subject to capital gains tax. Portfolio investments by foreigners are not subject to exchange controls.

Money market instruments

Government securities: The government of Botswana has run budget surpluses for more than a decade, and has had no need to borrow—a situation hardly conducive to the widespread circulation of Treasury bills or other government debt instruments. Indeed, the government's foreign reserves and other foreign assets are more than ten times the government and government-guaranteed foreign debt. The government has long been channeling income from the diamond industry into the economy to build infrastructure and create employment. A perpetual concern of the government and the central bank is to keep inflation under control to keep the non-diamond sector internationally competitive and avoid the so-called Dutch disease of an economy having no competitive sector other than minerals.

Other instruments: The central bank issues three- to nine-month Bank of Botswana Certificates (BOBCs, pronounced "Bob-sees") through monthly auctions to financial institutions. They are issued, not because of the need to borrow, but to give financial markets a risk-free benchmark instrument as a basis for determining other interest rates and to give the central bank information that helps it set monetary policy.

The policy of the central bank has been to keep real interest rates (the nominal interest rate minus the rate of inflation) at around 2-3 percent a year, and it prices BOBCs accordingly. Judging from the willingness of banks to buy BOBCs, the central bank is not pricing them too high. The central bank is thinking about making a real interest rate target, which at present is informal, into a formal goal. If it does, there is some question whether the goal would be sustainable. Many central banks have encountered trouble when they mistakenly targeted interest rates far above or below market rates. Also, giving real interest rates top priority in monetary policy would mean that the central bank could no longer shift priority between the real interest rates and the exchange rate, as it now seems to do.

The Bank of Botswana makes a market in BOBCs. It uses the price determined in the last auction as a middle rate, and offers to buy the certificates at a lower price that corresponds to an annualized interest rate of 30 basis points (0.3 percent) higher than the middle rate. It always stands ready to buy the certificates, but it only sells them between auctions if it has some in inventory. It sells at a higher price than the middle rate, corresponding to an annualized interest rate of 30 basis points lower than the middle rate. With debt securities, a higher price implies a lower interest rate and a lower price implies a higher interest rate.

The spread of plus or minus 30 basis points around the middle rate is rather large, and in principle should encourage buyers and sellers to use the Bank of Botswana only as a last resort. However, the central bank is considering whether it should cease making a market in BOBCs to encourage secondary trading by other parties. (This would not reduce its seldom-used operations as a lender of last resort, which it handles through a discount window.) Secondary trading, whether with the Bank of Botswana or with other parties, is light. One source attributed the thinness of the secondary market to the financial system being so small that the fate of holders of the certificates tends to move together; there is not the variety of buyers and sellers that exists in a bigger financial system. Local government bodies such as school boards are among the biggest holders of Bank of Botswana Certificates, and they tend to be rich or poor all together depending on the situation of the national budget. They, or the banks acting as their agents, tend to buy the certificates at auction and hold them to maturity. The stock exchange offers facilities for secondary trading of BOBCs, but only a handful of trades occurs each month. Prospects for the development of a dynamic secondary market in BOBCs do not exist—the need simply is not there. Hence, BOBCs are not now and will not soon be the basis for true open-market operations.

Other than Bank of Botswana Certificates, no money market instruments exist. The banks are highly liquid, so a lot of money is chasing few investment possibilities. Most of the wealth of the country is channeled through the Debswana diamond company, the government, and the state-owned utilities, none of which so far has needed to issue debt. Bankers indicated that no substantial demand exists to develop any money market instruments other than BOBCs. Banks have no plans to issue such instruments as negotiable certificates of deposits, bankers acceptances, or commercial paper in the near

future.

In the capital market, the government-owned Botswana Development Corporation is working on bringing out the country's first corporate bond issue. Currently, the government finances state-owned enterprises such as the telephone company through part of the government budget called the Public Debt Service Fund, but it wants state-owned enterprises to obtain financing through financial markets to make the costs of financing more transparent. The Botswana Development Corporation will serve as the test case for issuing bonds. It has discussed the terms of issue with investment bankers and has received proposals from them about their fees. The bond issue, which the Botswana Development Corporation had hoped to complete by September 1997, may be for 50 million pula (roughly \$14 million) with a maturity of seven years. The government telephone company is also considering issuing a bond but is not as far along as the Botswana Development Corporation in working out the details. It is also possible that the government or the central bank, which manages the government's foreign-exchange reserves, will issue a Eurobond (a foreign-currency bond). Again, the government does not need to borrow; the purpose of the bond would be to impress Botswana into the consciousness of international financial markets.

The government is also considering the idea of developing Botswana into an "offshore" financial center to attract business. Business would come mainly from South Africa, as Gaborone is within driving distance of Johannesburg. If the government proceeds with the idea, though, the experience of other offshore financial centers suggests that there will be no immediate spillover from offshore financial business to the domestic money market. That will especially be the case if, like some other countries, Botswana has rules that keep offshore and domestic business separate. Bermuda and the Bahamas have managed to maintain capital controls for residents while becoming offshore financial centers with few restrictions for nonresidents.

The payments system

There is a Central Clearing House in Gaborone, the capital and business center of the country. Local clearings also take place in the several other towns where banks have branches. The four commercial banks and the Botswana Cooperative Bank settle their balances through their head offices by transferring funds at the Bank of Botswana. Clearing in Gaborone occurs twice a day on weekdays and once on Saturday. The second weekday clearing is currently only for large payments (those exceeding 50,000 pula, or roughly \$14,000), but because volume is low it will soon be opened to smaller payments, too. Bank customers in Gaborone have access to funds after five working days for checks written within Gaborone, ten working days for checks from elsewhere in the country.

Clearing is done manually. Checks do not have magnetic ink character recognition (MICR), and banks do not exchange computer disks. The commercial banks have automatic teller machine networks but they are not linked, so customers of each bank must

use only that bank's machines. Barclays Bank and the First National Bank of Botswana also have point of sale networks, but the networks again are not linked. As in Zimbabwe, the banks are at varying stages of automation internally.

The most important part of the legal framework for the payments system is the clearing house rules. They are adequate for the situation and can be easily revised by agreement among the banks to cover new types of payment. Like the other countries of the region, Botswana is engaged in a project to improve its payments system. A small working group of bank staff (including staff of the central bank) started meeting in April 1997. Its task is to write a report taking stock of the current state of the payments system. The report was scheduled to be completed by November 1997. That working group will be folded into a larger working group comprising representatives of other interested parties, such as businesses. The larger working group will take 18 months to two years to complete its work. To inform the public about reform of the payments system and its implications, the Southern African Development Community sponsored two workshops, which were held in September 1997.

Scope for technical assistance

Though there are no money market instruments other than Bank of Botswana Certificates, there is no demand to develop other instruments at the moment. Nobody we interviewed saw the lack of other instruments as an obstacle to Botswana's financial deepening at present. Hence, technical assistance in this area does not seem useful.

There are, however, two aspects of the payments system where outside technical assistance could be helpful and where the central bank would welcome assistance.

(1) The large working group, which will take eighteen months to two years to complete its work. This will involve issues of standards like those discussed above for Tanzania, but will be broader because Tanzania has already resolved some details that Botswana has not about what changes to the payments system will occur.

(2) A more general and still longer-term aspect of the payments system: exploring how to move the country from reliance on debit instruments such as checks to credit instruments such as giro transfers. Shifting from debit to credit instruments can reduce risks in the payments system because the procedures for confirming that a payor has sufficient funds can be quicker with credit instruments.

Lessons learned

The four banks operating in Botswana have little need for anything more than the simplest of money markets, and see no need to change the status quo. On the rare occasions when they have a temporary cash shortage, help is but a phone call away, either to their head offices outside of the country, a procedure that does not require putting up collateral, or to a fellow banker in Gaborone, who may or may not require the pledge of BOBCs for a short

term loan of cash. Excess funds can be placed with affiliates in South Africa. Despite the lack of money market instruments other than Bank of Botswana Certificates, there is no perceived need to develop other instruments. In short, the money market, such as it is, appears to be entirely adequate to the needs of the country at present, and financial sector players are satisfied with the status quo in this respect.

While the efficiency of payments systems affects how well bank treasurers can do their job, there is only a tenuous link between the Botswana money market and the payments system, which exhibits notable weaknesses. Those weaknesses are not unique to Botswana, but are widespread in the region. Like all the other countries in the region, Botswana is a member of the Southern African Development Community, an organization that is working on a regional basis to solve problems in member country payments systems over a multi-year schedule with assistance from international donor agencies. In Botswana, a stocktaking of the current system has been taking place in 1997, and when completed there will be a larger working group devoting 18-24 months to address issues of standards like those discussed below for Tanzania. However, the scope will be broader because Tanzania has already resolved some details that Botswana has not about what changes will occur to the payments system. It is in the longer term, after 1999, where donor-supported technical assistance beyond that being offered by the World Bank through the African Development Community might be welcomed. This would be in the realm of longer-term aspects of the payments system: exploring how to move the country from reliance on debit instruments (such as checks) to credit instruments (such as giro transfers). This seems a reasonable goal in light of the tendency of banking systems everywhere to reduce uncertainty and the possibility of default in settling payments.

NAMIBIA

General

Namibia is included here as another source of comparison with the target countries because it is closely integrated with the South African financial system, and because it was possible for IMCC to gather information from indirect sources at no extra expense to the project.

Namibia has about 1.5 million people, slightly more than Botswana. Namibia has been independent of South Africa since 1990, but its economy and monetary system remain closely linked to South Africa. Eighty-five percent of Namibia's imports come from South Africa. Namibia's main exports are diamonds, meat, and fish. Like Botswana, Namibia is mostly desert, and it suffers periodically from droughts that depress agricultural production. Inflation currently hovers around 8 percent, mirroring that in South Africa because of the exchange-rate link, while interest rates on loans and deposits tend to be about 0.25 percent higher than in South Africa, reflecting a small risk premium.

Financial markets

Exchange rate and exchange controls: The Namibian dollar is pegged to the South African rand at 1 dollar = 1 rand. Both currencies circulate freely in Namibia, but the Namibian dollar does not circulate in South Africa. Namibia is part of the Common Monetary Area with South Africa, Lesotho, and Swaziland. No exchange controls exist within the area and, consonant with an identical policy in effect in South Africa, exchange controls are following a path of extinction within two years. Namibia consistently registers a deficit in its capital account and a surplus in its current account, signifying that the country is a net saver.

The peg to the South African rand limits the scope for an independent monetary policy. Open-market operations in government securities are not the main tool of monetary management. Rather, the central bank, the Bank of Namibia, adjusts the bank rate (the rate it charges commercial banks for overnight loans). Parallel adjustments by the banks to the prime rate follow almost automatically. Rates cannot diverge too far from rates in South Africa or banks will arbitrage the difference by lending to or borrowing from their parent banks in South Africa.

Insurance companies and pension funds may invest up to 65 percent of their funds abroad. Large corporations in Namibia often deposit short-term excess funds in Johannesburg, while Namibian banks use accounts with their parent banks in Johannesburg to manage their liquidity. Foreign-exchange export earnings of commercial companies do not have to be surrendered to Bank of Namibia (the central bank), though companies are expected to convert foreign exchange into Namibian dollars within six months of receipt.

Banking system: Until Namibia became independent in 1990, all of its financial

institutions were full branches of South African institutions. After independence, the South African financial institutions converted branches into wholly- or majority-owned Namibian subsidiaries, and banking in Namibia began with well-trained experienced personnel. Four of the five commercial banks are subsidiaries of South African banks; the exception is the locally owned Bank of Windhoek.

The real interest rate spread (net interest margin) for banks has averaged 5-6 percentage points in recent years. Banking is quite profitable in Namibia: consolidated return on equity for the commercial banks during 1993-5 varied from 25-35 percent a year. Reserve requirements on bank deposits are low, as in South Africa, varying from less than 1 percent to 3 percent depending on the type of deposit.

Interbank market: As in Botswana, the interbank market is informal, with trades being arranged by phone calls between banks. Since most banks are subsidiaries of South African banks, they also have the possibility of borrowing from their parent banks. The Bank of Namibia, the central bank, acts as a lender of last resort. In a pinch, the commercial banks can borrow money overnight from the central bank by pledging government securities as collateral. Since the central bank would charge a penalty rate of interest, commercial banks that are short of reserves typically prefer to borrow from their parent banks in South Africa instead.

Stock exchange: The self-regulated Namibian Stock Exchange owes most of its activity to dual listings with the Johannesburg Stock Exchange. Because of dual listings, the Namibian Stock Exchange has a market capitalization of about U.S.\$20 billion, the largest in Africa after South Africa. Local trading is light, although some local companies are listed.

Money market instruments

Government securities: By a recent treaty, the South African government renounced claims for infrastructure and other expenses it incurred before Namibia achieved independence. The treaty nearly halved Namibia's total government debt and almost eliminated the foreign portion of the debt. The remaining government debt consists mostly of Treasury bills, held mainly by banks, and bonds of 3-5 years, held mainly by nonbank financial institutions. The Finance Ministry would like to lengthen the maturity structure of the debt, which currently is heavily weighted towards the short term.

Treasury bills are almost always held to maturity. What secondary market exists in government securities consists of a handful of trades per week on the stock exchange. The Bank of Namibia sees the absence of a secondary market for government securities as a constraint to financial market deepening because open-market operations cannot function without active secondary trading. Though the central bank has expressed the desire to have an active secondary market, it has not yet done anything to encourage such a market. Within the stock exchange there is a bond market that facilitates secondary trading of Treasury bills and longer-term securities ("government stock"). The secondary market is

tiny.

Other instruments: Until 1995, bankers acceptances were a significant part of the liquid assets of banks, but they have virtually disappeared since then because banks are no longer allowed to count them towards reserve requirements. Without that incentive to issue bankers acceptances, banks use other ways of making loans. Since then bank holdings of negotiable certificates of deposit and Treasury bills have constituted about 75 percent of bank liquid assets.

Lessons learned

Namibia is of interest as an extreme example of the influence that South Africa exerts in the region. The monetary system may be said to be entirely derivative from the South African system, though by no means as sophisticated. Namibia has not yet celebrated its tenth anniversary as an independent nation. So far, the monetary link with South Africa—with the two currencies maintained at par with each other—has worked satisfactorily for Namibia. At least in banking circles, there seems to be no expressed desire to see Namibia diverge from its tight monetary alliance with South Africa. Any monetary reforms in Namibia would require a respectful attention to this voluntary alliance. As is the case with the four target countries, the payments system outside the capital city leaves something to be desired, and will be the subject of the regional reform attempts already going on in all the member countries of the Southern Africa Development Community.

TANZANIA

General

Tanzania's economy is just starting to recover from the retrogression it suffered under socialism, when all banks and nearly all companies were nationalized. Today there are still very few private companies except small ones owned mainly by Indian traders, who carried on what little commercial activity existed under socialism. The government is now trying to privatized hundreds of state-owned enterprises. The first group of 400 enterprises has been "commercialized," that is, structured to operate as if they were private companies, as the first step in passing full control to the private sector. Inflation and nominal interest rates have declined by more than 50 percentage points in the last few years, and inflation is now in single digits.

Financial markets

Exchange rate and exchange controls: The Tanzanian shilling has a floating exchange rate. All exchange controls were recently removed.

Banking system: There were no private banks at all until 1993-4, although there was informal banking carried on illicitly, mostly by Indian traders. The extent of this type of underground banking today in Tanzania and elsewhere in the region is impossible to measure accurately, but is believed still to be widespread. The remaining government-owned and sole domestic commercial bank, the National Bank of Commerce, still has 70 percent or so of deposits and loans. The National Bank of Commerce is characterized by inefficiencies on many fronts, and is the subject of ongoing privatization efforts fostered by the World Bank. Its market share is dropping as a dozen private banks, all subsidiaries of foreign banks appearing within the past three years, begin to capture some of its business. The presence of so many private banks new to the country cannot be explained by the existing level of commercial business, even though, according to one banker, the commercial banks are operating profitably. The foreign banks mostly compete with each other in financing of foreign trade, and make few loans yet. One explanation for what may seem an excessive number of banks is optimism about developing mineral resources that were little exploited under socialism.

Interbank market: There is no formal interbank market in Tanzania. Trading of reserves is done informally by phone calls between banks. A creditor bank may require the borrowing bank to put up Treasury bills as collateral for interbank loans or may lend on an unsecured basis to banks that it has pre-qualified as to risk. As of mid 1997 the banks had a lot of liquidity and few secure ways of investing it except in foreign assets. Reserve requirements for banks are currently at 12 percent, down from the former level of 20 percent; all reserves must be in cash balances. Banks cannot at present count their holdings in Treasury bills towards reserve requirements, though they can use Treasury bills as collateral when borrowing from the central bank. The Bank of Tanzania acts as a lender of last resort.

Stock exchange: The Capital Markets and Securities Authority (CMSA), which is in charge of the soon to be established Dar es Salaam Stock Exchange, announced in June 1997 that it had approved five companies out of 17 applicants to become licensed as dealers (Tanzania Securities Ltd., Exim Securities and Investments Co., Ltd., Rasilimali Ltd., Solomon and Co. Ltd., and Orbit Securities Co. Ltd.). The Authority licensed one person from each company as a representative. The companies were given two months to raise the minimum capital requirement of 10 million shillings for “single capacity” trading (dealing for themselves only) or 20 million shillings for “dual capacity” trading (dealing for themselves and acting as brokers for clients). They must also meet the other requirements that exist. Pending further study, the Authority is not allowing foreign companies and companies with foreign shareholders to participate in the stock exchange. The Authority is soon expected to approve the first listing on the stock exchange, Tanzania Oxygen Co. Ltd. Eight state-owned enterprises are scheduled to begin privatization by selling 25 percent of their shares on the stock exchange. There is some grumbling about the pace at which the Authority is operating, which many observers view as too slow.

Money market instruments

Government securities: A few years ago the government was borrowing heavily, mainly through issuing Treasury bills, to finance large budget deficits. Real interest rates were accordingly high. At one point, Treasury bills outstanding equaled 20 percent of gross domestic product, an extremely high proportion. In the last few years the government has reduced the deficit and limited its borrowing, so it has been able to influence interest rates somewhat rather than being at their mercy.

Treasury bills are not a lucrative investment today, but because so few other investments exist, they are much in demand. The yield on Treasury bills fell to a historical low of 5.38 percent a year on three-month bills during the first week of June 1997, before inching up about 1 percentage point. (Inflation is currently about 15 percent a year.) In 1994 the yield was 59 percent—about the same as the rate of inflation. Encouraged by the decline in yields, the Bank of Tanzania (the central bank), which is the government’s agent for selling Treasury securities, has increased the minimum purchase of Treasury bills from 500,000 shillings (almost \$850) to 1 million shillings (almost \$1700).

The Bank of Tanzania has announced that the government will soon begin issuing two-year Treasury bonds to complement the existing three-month, six-month, and one-year bills. Initially anyone will be able to buy the bonds, but the Bank of Tanzania wants to establish a group of primary dealers to facilitate trading in government securities. After it has chosen them, only they will be able to buy the bonds at auction; the central bank and the government apparently hope that this will encourage a secondary market in the bonds (in which the primary dealers will resell the bonds to other parties). The secondary market is supposed to operate on the Dar es Salaam Stock Exchange, which is also supposed to be a secondary market for corporate bonds.

While the stock exchange may in the future make a secondary market for Treasury bills, at present there is no such market, and even banks tend to hold their Treasury bill acquisitions until maturity. However, the Bank of Tanzania has announced that it will soon begin repurchase operations (repos).

Other instruments: Citibank recently brought to market the first commercial paper issue in Tanzania for one of the few strong private companies there. The issue was greatly oversubscribed, such is the public's appetite for good investments as an alternative to bank deposits or government securities.

A finance corporation, Furaha Finance, is now issuing bearer (negotiable) certificates of deposit in Tanzanian shillings and U.S. dollars. The advantage of negotiable certificates of deposit compared to nonnegotiable certificates is that they can be traded among holders without involving the issuer; hence if the holder needs cash he can trade the certificate rather than having to hold it until maturity or cash it prematurely at a penalty. Commercial banks do not as yet issue negotiable certificates of deposit, so there is no trading in negotiable certificates of deposit among banks as there is in other countries, including the United States and, among the countries discussed here, Zimbabwe.

The payments system

The payments system is dominated by the government-owned National Bank of Commerce (NBC), which was created in 1967 from nationalized foreign banks. It has 130 branches scattered across the country. Its nearest rival is CRDB Bank, known before its recent privatization as the Co-operative and Rural Development Bank; CRDB Bank has 20 branches. Other commercial banks have at most just a few branches. The Post Office Savings Bank is little active at present.

About two-thirds of banking business is concentrated in Dar es Salaam. Dar es Salaam has a clearing house, which opened in 1992; a clearing house also exists in Arusha, and there are local clearing arrangements in other towns where there is more than one bank. The clearing house is currently a part of the Bank of Tanzania, but there are plans to make it a separate organization. Banks settle their clearing balances by daily transfers of funds at the central bank.

Payments within Dar es Salaam clear in three working days, though special procedures exist to facilitate same-day settlement for large payments within Dar es Salaam (those exceeding 500,000 shillings, or roughly \$800). The goal is to reduce the time for normal settlements to two days. Outside Dar es Salaam, the payments system does not work well.

Payments take up to 28 working days to clear, and can take even longer if errors in processing occur. It is possible to speed payments through telegraphic transfers, but that involves paying a fee that is only worthwhile if the sum involved is large.

The payments system is paper-bound. There are no automatic teller machines in Tanzania at present, though Standard Chartered Bank has announced plans to introduce them, nor

do debit cards exist. Paper-bound systems are typically more prone to error than electronic ones, and the incidence of errors in payments is considered high (though no statistics were available). Check fraud is a problem, and one reason checks outside Dar es Salaam take so long to clear is the need to verify that check writers have funds in their accounts.

Difficulties with payments outside of Dar es Salaam largely reflect difficulties within the National Bank of Commerce. However, the bank is scheduled to be divided into three banks and privatized. The three new banks will be NBC Trade Bank, NBC Regional Bank, and NBC Micro Finance Bank. The break-up was originally scheduled to begin July 1, 1997, but was then delayed until September. The privatization created political controversy because, among other things, it envisaged firing half of the bank's 4,000 employees and closing 13 of the 130 current branches. The current levels are themselves a large reduction: four years ago, the bank had 10,000 employees and 205 branches. The World Bank has been helping the government prepare to privatize the National Bank of Commerce, and has conditioned a loan of U.S.\$125 million on progress with the privatization. The loan would include \$25 million specifically for privatizing the bank.

The government hopes to increase both efficiency and competition in the banking sector by breaking up the National Bank of Commerce. Some foreign banks are proceeding to establish branches outside Dar es Salaam. All this will tend to improve the payments system since speed of clearing checks is one area of service where banks compete.

A goal of the Bank of Tanzania in the next 12 months is to reduce the maximum clearing time for payments outside of Dar es Salaam from 28 working days to 14 working days. To that end, it is going to use its head office in Dar es Salaam plus its branches (in Arusha, Mbeya, Mwanza, and Zanzibar) to speed payments across the country. The head office and branches are in the main centers of commercial activity, so this will alleviate the current problem. The Bank of Tanzania will have an online network that commercial banks can use to communicate payments instructions.

The network will work through exchange of computer disks. When the National Bank of Commerce was the only commercial bank, it exchanged data with the central bank using disks, but now that there are multiple commercial banks there is no common standard. One of the problems in choosing a compatible software standard is security; all the banks must feel that the system is difficult to tamper with. Another issue is standards for magnetic ink character recognition (MICR), which is essential to automating check processing. The central bank and the commercial banks have a committee to resolve these issues, and have made some progress, but have other topics still to resolve.

Besides helping with the privatization of the National Bank of Commerce, the World Bank is engaged with the Bank of Tanzania and the government on a long-term project to modernize the payments system. The project is looking ahead as far as 2005. It includes a legal committee to identify laws that need to be revised and new laws that need to be written to support modernization. (The laws will deal with such issues as removing ambiguity about types of payments instruments used elsewhere that in Tanzania currently

are outside the scope of the law.) As part of that project, the central bank was scheduled in July 1997 to release a draft paper taking stock of the current state of the payments system. From July until perhaps as late as February 1998, it is to engage in design and soliciting requests for proposals to modernize the system.

Scope for technical assistance

Any assistance provided under CAER II would need to fit within the scope of the Bank of Tanzania's long-term project with the World Bank and would need to avoid establishing procedures that do not harmonize with it. There seems to be room for technical assistance that meets this description.

Because local expertise concerning computer software security and MICR is not highly developed, the central bank would welcome technical assistance in those areas. However, such assistance needs to recognize that many decisions about how things will work have already been made. The central bank hopes to complete the determination of standards by June 1998.

The central bank, which is the depository for Treasury bills, is also planning to convert the system for keeping track of Treasury bills from manual book entry to automatic book entry. The bank would like to do so in two or three years, as the volume of Treasury bill trading increases, but automation cannot be done overnight and it wants to prepare for automation. Here again, local expertise is lacking. The central bank would welcome advice from an experienced practitioner in management information systems (MIS) about how to establish automated book entry in the most efficient way.

Lessons learned

Tanzania is starting almost from scratch in re-establishing a market-oriented financial system, much like Eastern European countries since 1989. Potentially useful parallels exist between the tasks that Tanzania faces in money markets and the big tasks that those countries faced. In Eastern Europe there have been four big problems: keeping inflation low, privatizing government-owned banks, handling banking crises, and improving the payments system. Inflation is now fairly low in Tanzania. The government is grappling with privatizing the National Bank of Commerce. Because Tanzania does not yet have any large, local privately owned banks, it has not had the bank failures that have affected many Eastern European countries. The parallels between the experience of Eastern Europe and the experience of Tanzania suggest that bank failures are a possibility for which the government should be prepared. Finally, as in Eastern Europe initially, the payments system in Tanzania is slow. After the National Bank of Commerce is privatized, fast settlement of payments will become quite important in reducing the risk that a default by one bank will drag down other banks. Typically, the slower the payments system, the more banks owe to each other in the form of checks making their way back to payers' banks. A default by one bank that owes others substantial amounts can wipe out their net worth.

The range of money market instruments in Tanzania, though limited, seems appropriate to its level of economic development. The market for Treasury bills is increasing, and there are stirrings of negotiable certificates of deposit becoming used as an instrument. Capital markets are likely to remain small for some years, until Tanzania becomes richer and has more privately owned businesses big enough to bypass banks as sources of funds.

UGANDA

General

Uganda is continuing with its economic reforms and by all indications is enjoying healthy growth. Real growth per person from 1996-98 is expected to average 6 percent per year; as of mid 1997 the annual rate of inflation was about 8 percent. High coffee prices in 1996 and 1997 have helped economic growth. Privatization of state enterprises has moved slowly, and no shares have yet been offered to the public in privatized companies.

Although the economy is growing and economic reforms are progressing, there is little impetus for capital markets to develop further at present because Uganda is starting from a low base. Accordingly, development of an active money market will probably not occur quickly either.

Financial markets

Exchange rate and exchange controls: The Ugandan shilling has a floating exchange rate. No exchange controls exist.

Banking system: In the 1970s the government nationalized the banks. Private ownership returned in 1987. Both foreign-owned and domestic banks exist in Uganda. The government-owned Uganda Commercial Bank, which is being privatized and recapitalized, has the largest number of branches. Domestic banks tend to be less well capitalized than foreign banks. Commercial lending is limited because private-sector borrowers who are good credit risks are few. Real interest rates for loans are about 20 percent. Reserve requirements on bank deposits are 25 percent.

Interbank market: There is a limited interbank lending market, in which credit quality is a major concern. Accordingly, the healthier banks engage in interbank lending as liquidity requirements necessitate. The central bank, the Bank of Uganda, acts as a lender of resort. Commercial banks can and sometimes do sell Treasury bills to the central bank to obtain reserves, though that is costly because the central bank demands a discount from the price the holder could get in the small secondary market.

Stock exchange: A stock exchange, the Uganda Securities Exchange, has recently been created. Efforts are underway to hire an executive officer to direct the realization of a working exchange. The Capital Markets Authority, the regulatory body, has licensed eight brokers; thus, participants are preparing for an actual exchange to evolve. No publicly traded shares exist yet, and the Capital Markets Authority serves more as a promoter than regulator at this stage. Privatization of state enterprises is expected to result in public sales of shares, which could then be traded on the stock exchange. The Capital Markets Authority is also considering allowing Treasury bills to be traded on the exchange. That might help the now tiny secondary market in Treasury bills grow, since it would make the secondary market more visible and accessible to the public. A draft law authorizing unit

trusts is currently under review; once enacted, it will enable money market mutual funds and other investment vehicles to be established. Thus, the infrastructure is just now coming into place for an actual, functioning exchange to evolve.

Money market instruments

Government securities: Banks are required to hold one-quarter of their 25 percent reserve requirements in the form of three-month Treasury bills. Thus, it is not surprising that half of all Treasury bills outstanding are three-month bills. The central bank also issues its own six-, nine-, and twelve-month bills. Interest rates on Treasury bills in the primary market are determined by competitive bidding and currently range from 11-14 percent. Virtually no secondary market exists for Treasury bills.

Most purchases of Treasury bills are by financial institutions, including insurance companies. However, a few wealthy individuals and a few corporations buy Treasury bills in the primary market. Treasury bills can also be purchased at the weekly auctions on a noncompetitive basis. The rate is linked to the rate established by competitive bidding, similar to procedures that exist in the United States for individual investors buying U.S. Treasury bonds.

Other instruments: The central bank can issue its own short-term securities and has done so occasionally. Other instruments, such as commercial paper and negotiable certificates of deposit, do not exist at present. The central bank is exploring extending the maturities of government debt and issuing government notes.

The payments system

The payments system is paper-based. Clearing takes three business days in Kampala and up to ten business days in the rest of the country. The central bank provides work space for banks to clear checks. Discussions are in progress to create a procedure for achieving same-day settlement when all participants have the appropriate technology. Once the capital markets begin functioning, it will become critical to achieve same-day settlement to reduce settlement risk.

Scope for technical assistance

There does not appear to be worthwhile scope for technical assistance within the framework of the project. The limited range of money market instruments—comprising only Treasury bills—corresponds to the limited range of investment opportunities available.

Lessons learned

Uganda is at a level of financial development broadly similar to Tanzania, though it started earlier and has proceeded farther than Tanzania in privatizing banks. Reserve

requirements are high for such an otherwise liberal financial system; in fact, they are the highest of any country of the survey. High reserve requirements protect depositors, but tend to reduce lending and raise interest rates for private-sector borrowers because banks must lock up so much of their funds in Treasury bills or in non-interest-bearing reserves at the central bank. The payments system is faster in Uganda than in Tanzania, which is related to their difference in size: Uganda is only one-quarter as big as Tanzania. Still, making payments faster would reduce the risk of a default by one bank dragging down others.

The money market is rudimentary and the capital market is just getting started. Eventually, high reserve requirements may spur the creation of financial instruments that offer better interest rates than banks, both for borrowers and lender, because they are not subject to reserve requirements. However, a more effective way to reduce the cost of borrowing would be to lower reserve requirements.

ZIMBABWE

General

Zimbabwe has tighter exchange controls but more advanced financial markets than the other target countries. The annual rate of inflation in Zimbabwe has fluctuated around 20 percent, higher than in any other country surveyed here.

It may be an oversimplification to say that in the other countries fiscal and monetary policy are tightly coordinated, but in Zimbabwe fiscal policy (administered by the Ministry of Finance) and monetary policy (administered by the Reserve Bank of Zimbabwe, the central bank) seem often to work against each other. For example, attempts to reduce inflation are offset by government deficit spending that cannot all be financed by issuing bonds. A reliable source indicated that macroeconomic instability is the main impediment to deepening financial markets in Zimbabwe. The source also stated that there is a need for training the professional staff of the Reserve Bank. Liberalization of the economy has only been going on for about four years, and it has left a large part of the staff of the central bank ill-equipped to deal with serious fiscal problems and with the new paradigms that liberalization has engendered.

There still exists a strong element of protectionism for local industries in Zimbabwe. The new tariff structure promotes local industrial output but is reminiscent of import substitution policies that proved so unsuccessful in Latin America two decades ago. It raises doubts about the future of attempts to create a unified tariff regime in the region and the ultimate goal of eliminating all intraregional tariffs.

Nevertheless, there are many signs of vibrancy and strength in the economy, and Zimbabwe has the most developed financial market in the region after South Africa. Zimbabwe boasts a well developed and fairly advanced banking and financial infrastructure. It has five commercial banks, five finance houses, four building societies, three development finance institutions, nine merchant banks, a leasing company, a vibrant stock exchange, and several insurance companies and pension funds.

Financial markets

Exchange rate and exchange controls: The Zimbabwean dollar has a floating exchange rate. Exchange controls drastically restrict the ability of domestic investors to take portfolio positions abroad. (It is unclear how effective the controls are.) Although liberalization of the foreign exchange market in Zimbabwe has not progressed yet as far as in its neighbors in the region, there is progress in that direction. There are no current-account restrictions, but restrictions do exist for capital-account transactions. All companies, regardless of when they were established in Zimbabwe, can now repatriate 100 percent of their profits and dividends. All new investments made since 1993 can remit capital upon disinvestment. Exporters are now allowed to offer credit terms for 180 days, up from 90 days. Insurance companies and pension funds are still not permitted to spread

their investment risks outside Zimbabwe borders, and in fact must invest 55 percent of their funds in government securities and the rest in other domestic investments.

Banking system: Like South Africa, Zimbabwe regulates institutions rather than financial functions. The diversified group of financial institutions already mentioned might appear to provide a good deal of competition in the market, but since each type of financial institution carries out well-defined tasks and no one type can compete directly in another's market, competition is in fact quite limited. This is borne out by the wide net interest spread enjoyed by the few banks that operate, a possible sign of oligopolistic practices. Of the five commercial banks, two are locally owned and three are subsidiaries of foreign banks (one British and two South African). The commercial banks are the exclusive agents for the U.S.\$4 billion market for export and import foreign exchange dealings. The prime lending rate is 26 percent, but loans at 30-35 percent are common. Two new banks have been authorized to open up in the near future, and others are trying to enter the lucrative foreign-trade market.

There are heavy reserve requirements, currently 22 percent, on bank deposits. Although such a high reserve requirement absorbs liquidity and enables the government to raise funds cheaply, it also increases the spread between interest rates on loans and deposits, which is currently about 10 percentage points (compared with 3-4 percentage points in the United States). This level of reserve requirements imposes a heavy tax on banking, and is normally a trait of "financial repression"—regulating the financial system to subsidize government borrowing.

Interbank market: The interbank market for the trading of funds among banks is an informal one. Banks are not permitted to maintain long positions in foreign exchange as a means of managing liquidity. They invest heavily in three-month Treasury bills, and although there is the possibility of selling them, banks generally hold them until maturity. Prudential rules limit the capacity of banks to hold direct proprietary positions in equity, although they can own subsidiaries that take such positions. Banks look to negotiable certificates of deposit as their principal means of raising funds in the money market. The central bank, the Reserve Bank of Zimbabwe, acts as a lender of last resort. For liquidity emergencies, banks can borrow overnight from the central bank at a penalty rate, which as of mid 1997 was 23.5 percent. (The penalty rate is not punitive when one takes account of the rate of inflation.)

Stock exchange: The Zimbabwe Stock Exchange industrial index experienced a growth rate of 90 percent in U.S. dollar terms in 1996, while experiencing a record turnover ratio. The government is attempting to encourage additional foreign participation in the stock exchange. It has raised the limit from 35 percent to 40 percent for foreign participation in listed companies and now permits individual portfolio investors, local or foreign, to invest up to 10 percent in any single issue (up from 5 percent). The securities market in Zimbabwe is the most developed in the region, after South Africa. The stock exchange has been in existence since 1946, although stock exchanges in one form or another were functioning as far back as the late 1800s. Approximately 60 companies are listed on

the stock exchange, and market capitalization is about U.S.\$5 billion.

The government offers capital gains tax incentives for individuals to make portfolio investments in the stock exchange. In addition to corporate shares, government and municipal bonds are traded on the Zimbabwe Stock Exchange.

Money market instruments

Government securities: The government budget is frequently in deficit, with the 1997 deficit likely to reach 11 percent of GDP. (In most countries, deficits exceeding 4-5 percent a year imply some degree of finance through inflation.) Exchange restrictions mean that financial institutions have few options but to invest reserves and excess liquidity in Treasury bills, which yield negative real interest rates.

Other instruments: Negative real interest rates on Treasury bills have spurred the development of other instruments, some of which have yielded high real returns. "Discount houses" have served as intermediaries in this market. These discount houses resemble investment banks in that they take positions in debt securities and make a market. This means that the wide array of investment options they offer to banks makes it possible for banks to manage their liquidity positions much more effectively. The discount houses are dealers in deposits and short-term money market investments including: government securities, bankers acceptances, Grain Marketing Board bills, municipal bonds, and negotiable certificates of deposit.

Despite the variety of instruments available, the money market is still principally based on the secondary purchase and sale of Treasury bills. The most liquid instrument in the money market is the three-month bill, with up to Z\$25 billion (a little over U.S.\$2 billion) outstanding. Purchases of Treasury bills may be made outright or on a repo basis. The current yield on Treasury bills is several points below the rate of inflation. Discount houses buy Treasury bills at the auctions and buy and sell them in secondary trading. The main clients of discount houses are banks, corporate pension funds, insurance companies, and a few high net worth individuals. They have some business with banks in negotiable certificates of deposit and very little in bankers acceptances. Discount companies deal only in domestic instruments.

The payments system

Zimbabwe has more than a dozen important financial institutions, including commercial banks and building societies, that participate in the payments system. Clearing occurs in Harare twice a day through transfers of funds at the central bank, the Reserve Bank of Zimbabwe. Local clearing also occurs in other cities; financial institutions settle the balances of the local clearings through their head offices in Harare.

At present, clearing among banks is done manually. Individual financial institutions are at varying stages of automation internally. Automatic teller machines are common in the

larger towns. Many automatic teller machines are linked in a nationwide network called Zimswitch, which allows customers of participating institutions to withdraw cash from any machine in the network. Individual banks, particularly Standard Chartered Bank, also have agreements with supermarkets and other merchants to enable customers to use automatic teller cards or other cards to buy goods. Since May 1, 1997, many of these “point of sale” terminals have become part of the Zimswitch network, so customers from any financial institution in the network can use them.

Financial institutions vary widely in the time they take to allow customers access to funds. Checks within Harare take two to 21 working days to clear, depending on the institution; checks from outside Harare take ten to 21 working days, again depending on the institution. Building societies generally have longer clearing periods than commercial banks, apparently because they want to encourage customers to use accounts for the accumulation of savings rather than for making small payments from day to day. Transportation and communications are better than in Tanzania, and seem to cause no great problems for the payments system. Nor do people seem dissatisfied with the system to the extent they are in Tanzania.

It is possible for customers to obtain access to funds quickly through special procedures, such as wire transfer, though it is generally worthwhile to do so only for large payments, since special procedures involve paying extra fees. Financial institutions use special messenger delivery to speed large payments within Harare, which are cleared in one day rather than two.

The Zimswitch network could provide a basis for more automated handling of checks among banks. In the electronic inks they have established so far, financial institutions in Zimbabwe have already had to settle issues of security and software compatibility—issues that their counterparts in Tanzania are just now considering. Zimbabwe may even leapfrog the United States in the shift from checks to debit cards. Debit cards are not widely used now in the United States, in part because the habit of using checks is strong. In Zimbabwe, checks are not as widely used as in the United States, so Zimbabweans may be less attached to paper forms of payment than Americans have been.

Like other countries that belong to the Southern African Development Community, Zimbabwe has a payments system reform project underway. The project is more advanced than its counterparts in Tanzania and Botswana. The project aims to move the banking system to highly automated (electronic) clearing among banks.

Coordination between monetary and fiscal policy

Zimbabwe has a moderate degree of financial repression. The currency is not fully convertible, inflation is often above 20 percent a year, and the government uses reserve requirements and liquidity ratios to create artificial demand for Zimbabwe dollars and government debt. Sources expressed concern that monetary and fiscal policy sometimes seem not to be well coordinated—for example, the government is issuing new debt that

will likely be paid in part through future inflation at the same time that the central bank is trying to reduce inflation.

In some other countries USAID has funded workshops and other activities complementing efforts by other organizations, particularly the International Monetary Fund and the World Bank, to improve coordination between monetary and fiscal policy. In Zimbabwe, though, an existing institution already fulfills this function. The Macroeconomic and Financial Management Institute of Eastern and Southern Africa (MEFMI) is based in Harare. MEFMI was formerly called ESAIDARM (Eastern and Southern African Initiative in Debt and Reserves Management). It is a cooperative venture among nine southern African countries and foreign partners, including the IMF, World Bank, and the Swedish government. MEFMI offers courses for central bank and government officials in financial programming, debt management, and reserves management, among other subjects. For instructors, MEFMI draws upon people inside and outside the region. In some other countries, staff of the central bank and the finance ministry lack access to training that would help improve the coordination of fiscal and monetary policy. In Zimbabwe, the training is there for the taking, though it has not yet resulted in better coordination.

Scope for technical assistance

Zimbabwe already has what is perhaps the most developed financial system and the broadest range of financial instruments in Africa after South Africa. Technical assistance in developing new money market instruments therefore seems unnecessary under current conditions. Because the payments system is already partly automated and the necessary local expertise exists for it to achieve further automation as that becomes profitable, technical assistance from outside seems unnecessary in that area also. Finally, regarding coordination between fiscal and monetary policy, the problem is not a lack of technical knowledge: MEFMI offers extensive support. The kind of assistance that might help is outside the scope of this project and usually falls more to the IMF.

Lessons learned

Zimbabwe has what may be the most sophisticated financial system in the world in relation to its level of economic development. It is reminiscent of Brazil and some other Latin American countries for its variety of financial institutions operating in an economy kept fairly closed by trade protectionism and exchange controls. Unlike many of them Zimbabwe has a slow payments system, but it is taking steps to reduce delays. Financial repression is higher in Zimbabwe than in any other country in the survey, reflecting the lack of coordination between fiscal and monetary policy.

Financial repression is a tricky balancing act. When repression becomes too great, people dump the local currency in favor of foreign currency. They may even withdraw interest-earning deposits in local currency and exchange them on the unofficial market for U.S. dollar notes, which earn no interest yet are a better store of value. In November 1997

Zimbabwe suffered the consequences as the Zimbabwe dollar depreciated 50 percent in a single day against the U.S. dollar. The central bank intervened to bolster the exchange rate, but during 1997 the Zimbabwe dollar depreciated by more than 30 percent against the U.S. dollar. Such rates of depreciation can weaken a financial system by discouraging people from depositing their savings with it.

APPENDIX: BACKGROUND INFORMATION

Under the Consulting Assistance for Economic Reform (CAER) II program, USAID is funding an African Money Markets Development Project. The project aims to improve macroeconomic stability by strengthening financial sectors in sub-Saharan Africa, specifically by strengthening money markets.

As part of the project the International Management and Communications Corp. (IMCC) conducted a survey of money markets in selected sub-Saharan countries, including **Botswana, Tanzania, Uganda, and Zimbabwe**. For comparative purposes, the survey also covers South Africa and Namibia. IMCC sent three people to the selected countries: a banker, a monetary economist, and a capital markets specialist. Dennis Sheets, a former banker, visited Botswana, Tanzania, and Zimbabwe from April 10-23, 1997. Though not a project target country, South Africa was also studied by Mr. Sheets in coordination with other work there because of its influential position as the largest economy in the region and because of its potential as a model and training center for other countries. Mr. Sheets also indirectly gathered information on Namibia, which is of interest because of its close financial links to South Africa. Kurt Schuler, an economist, followed up with a visit to Botswana, Tanzania, and Zimbabwe from June 15-July 2, 1997. He investigated the areas that Dennis Sheet's visit had singled out as most promising for further research and possible technical assistance: developing money market instruments, improving payments systems, and (in Zimbabwe only) improving coordination between monetary and fiscal policy. David Weig, an economist and capital markets specialist with extensive experience in Uganda, gathered information on that country in coordination with work on another project there.

The opinions here are not necessarily those of our sources in the countries surveyed (listed below), nor are they necessarily the opinions of the Harvard Institute for International Development or USAID.

Relation of this survey to existing literature

Descriptions of money markets in southern Africa are scarce. Fry et al. (1996) make some brief descriptions, but their focus is on central banking rather than money markets. They include all of the countries surveyed here, but as part of a wider project comparing 44 countries all over the world. Fry et al. (1996: 69-76) characterize how developed money, bond, and equity markets are in each country. The table above adds detail to the necessarily limited comparisons made there.

Some descriptions exist of stock markets, and there are a number of descriptions of monetary policy in various countries (in particular Duesenberry and McPherson 1991 and Duesenberry et al. 1996), but written information on money markets is hard to find outside the business press of the countries involved. The countries of the region are just now themselves accumulating information on their payments systems as part of their attempt to

meet regional standards for reform.

Because descriptions of money markets in southern Africa are scarce, analyses based on investigation of the particular features of individual money markets are scarcer still—apparently nonexistent, in fact. This survey adds a level of detail lacking in previous studies.

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Ms. Donna M. Nemer—Vice President, Citibank, Johannesburg.

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